

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method comprising:
storing native code associated with a first method within a native code space;
creating a symbolic reference to the first method in a method table;
determining whether the native code space exceeds a threshold in response to an
invocation of a second method;
incrementing method counters each time the first method or the second method is
invoked, wherein the method counters correspond to the first method and
the second method;
unwinding a stack to determine ~~which methods are~~ whether the first method or the
second method is active based on whether a corresponding method counter
has exceeded a count threshold;
reclaiming the native code associated with the first method and compiling byte
code into native code associated with the second method in response to
determining that the second method is active; and
updating the method table for the first method to reference an appropriate
symbolic reference.
2. (Currently Amended) The method ~~as set forth in~~ of claim 2, wherein reclaiming
the native code associated with the first method and compiling byte code into
native code associated with the second method in response to the determination
comprises reclaiming the native code associated with the first method in response
to a determination that the native code space exceeds the threshold.

3. (Currently Amended) The method ~~as set forth in~~ of claim 2, further comprising storing the native code associated with the second method within the native code space in response to the compilation.
4. (Currently Amended) The method ~~as set forth in~~ of claim 2, further comprising: invoking the first method following the reclamation; and re-compiling byte code into the native code associated with the first method in response to the invocation of the first method.
5. (Currently Amended) The method ~~as set forth in~~ of claim 2, wherein reclaiming the native code associated with the first method and compiling byte code into native code associated with the second method in response to the determination comprises compiling byte code into native code associated with the second method.
6. (Currently Amended) The method ~~as set forth in~~ of claim 5, wherein compiling byte code into native code associated with the second method comprises compiling byte code into native code associated with the second method utilizing a just-in-time compiler.
7. (Currently Amended) The method ~~as set forth in~~ of claim 2, wherein reclaiming the native code associated with the first method and compiling byte code into native code associated with the second method in response to the determination comprises:

determining whether the first method is active or inactive; and
reclaiming the native code associated with the first method in response to a
determination that the first method is inactive.

8. (Currently Amended) The method ~~as set forth in~~ of claim 7, further comprising:
reclaiming the native code associated with the first method and compiling byte
code into native code associated with the second method in response to the
determination further comprises determining whether the first method is
hot or cold in response to a determination that the first method is inactive;
and
reclaiming the native code associated with the first method in response to a
determination that the first method is inactive comprises reclaiming the
native code associated with the first method in response to a determination
that the first method is cold.
9. (Currently Amended) A machine-readable medium having stored thereon data
representing sets of instructions which, when executed by a machine, cause the
machine to:
store native code associated with a first method within a native code space;
create a symbolic reference to the first method in a method table;
determine whether the native code space exceeds a threshold in response to an
invocation of a second method;

increment method counters each time the first method or the second method is invoked, wherein the method counters correspond to the first method and the second method;
unwind a stack to determine ~~which methods are~~ whether the first method or the second method is active based on whether a corresponding method counter has exceeded a count threshold;
reclaim the native code associated with the first method and compiling byte code into native code associated with the second method in response to determining that the second method is active; and
update the method table for the first method to reference an appropriate symbolic reference.

10. (Currently Amended) The machine-readable medium of claim 9, wherein reclaiming the native code associated with the first method and compiling byte code into native code associated with the second method in response to the determination comprises reclaiming the native code associated with the first method in response to a determination that the native code space exceeds the threshold.
11. (Currently Amended) The machine-readable medium of claim 9, wherein the sets of instructions, ~~when executed by the machine, further~~ when further executed, cause the machine to perform operations comprising storing the native code associated with the second method within the native code space in response to the compilation.

12. (Currently Amended) The machine-readable medium of claim 9, wherein the sets of instructions, ~~when executed by the machine, further~~ when further executed, cause the machine to perform operations comprising invoking the first method following the reclamation; and ~~re-compiling re-compile~~ byte code into the native code associated with the first method in response to the invocation of the first method.
13. (Currently Amended) The machine-readable medium of claim 9, wherein reclaiming the native code associated with the first method and compiling byte code into native code associated with the second method in response to the determination further cause the machine to ~~comprises compiling compile~~ byte code into native code associated with the second method.
14. (Currently Amended) The machine-readable medium of claim 13, wherein compiling byte code into native code associated with the second method further cause the machine to ~~comprises compiling compile~~ byte code into native code associated with the second method utilizing a just-in-time compiler.
15. (Currently Amended) The machine-readable medium of claim 9, wherein reclaiming the native code associated with the first method and compiling byte code into native code associated with the second method in response to the determination further cause the machine to ~~comprises:~~
~~determining-determine~~ whether the first method is active or inactive; and

~~reclaiming~~reclaim the native code associated with the first method in response to a determination that the first method is inactive.

16. (Cancelled)

17. (Currently Amended) A data processing system comprising:

a storage device; and

a processor coupled with the storage device, the processor to process data and execute instructions; ~~and, the processor to:~~

~~a memory coupled with the storage device and the processor, the memory to store data including a plurality of instructions which when executed by the processor cause the data processing system to perform operations having:~~
~~storing~~store native code associated with a first method within a native code space of the memory;

~~creating~~create a symbolic reference to the first method in a method table;

~~determining~~determine whether the native code space exceeds a threshold in response to an invocation of a second method;

incrementing method counters each time the first method or the second method is invoked, wherein the method counters correspond to the first method and the second method;

unwinding a stack to determine ~~which methods are~~ whether the first method or the second method is active based on whether a corresponding method counter has exceeded a count threshold;

reclaiming the native code associated with the first method and compiling byte code into native code associated with the second method in response to determining that the second method is active; and updating the method table for the first method to reference an appropriate symbolic reference.

18. (Currently Amended) The data processing system of claim 17, wherein when reclaiming the native code associated with the first method and compiling byte code into native code associated with the second method in response to the determination ~~comprises reclaiming, the processor is further to reclaim~~ the native code associated with the first method in response to a determination that the native code space exceeds the threshold.
19. (Currently Amended) The data processing system of claim 17, wherein the ~~plurality of instructions when executed further cause the data processing system to perform operations comprising storing~~ processor is further to store the native code associated with the second method within the native code space in response to the compilation.
20. (Currently Amended) The data processing system of claim 17, wherein the ~~plurality of instructions when executed further cause the data processing system to perform operations comprising invoking~~ processor is further to invoke the first method following the reclamation; and re-compiling byte code into the native

code associated with the first method in response to the invocation of the first method.

21. (Currently Amended) The data processing system of claim 17, wherein when reclaiming the native code associated with the first method and compiling byte code into native code associated with the second method in response to the determination, the processor is further to ~~comprises compiling compile~~ byte code into native code associated with the second method.
22. (Currently Amended) The data processing system of claim 21, wherein when compiling byte code into native code associated with the second method, the processor is further to ~~comprises compiling compile~~ byte code into native code associated with the second method utilizing a just-in-time compiler.
23. (Currently Amended) The data processing system of claim 17, wherein when reclaiming the native code associated with the first method and compiling byte code into native code associated with the second method in response to the determination ~~comprises~~, the processor is further to:
determining ~~determine~~ whether the first method is active or inactive; and
~~reclaiming~~ ~~reclaim~~ the native code associated with the first method in response to a determination that the first method is inactive.
24. (Currently Amended) The data processing system of claim 23, further ~~comprising~~ wherein the processor is further to:

~~reclaiming~~reclaim the native code associated with the first method and compiling byte code into native code associated with the second method in response to the determination further comprises determining whether the first method is hot or cold; and

~~reclaiming~~reclaim the native code associated with the first method in response to a determination that the first method is inactive comprises reclaiming the native code associated with the first method in response to a determination that the first method is cold.

Claims 25-28 (Cancelled)